

Application Number 09/653,701
Amendment dated December 6, 2005
Reply to Office action of June 6, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled)

Claim 2 (previously canceled)

Claim 3 (currently amended): The apparatus as claimed in claim 2claim 11, wherein uncompressed digital video streams having been edited data is transferred from said video output of said graphics processor chip to said codec for compression and storage in said video data-storage device.

Claim 4 (currently amended): The apparatus as claimed in claim 3, wherein said graphics processorchip has an input buffer for storing a sequence of fields of said at least two real-time uncompressed digital video streams video inputs and an output buffer for storing a sequence of fields of said uncompressed digital video streams having been editedgraphics processor video output.

Claim 5 (original): The apparatus as claimed in claim 4, wherein said input buffer also stores input graphic image fields.

Claim 6 (currently amended): The apparatus as claimed in claim 11claim 1, wherein said graphics processorchip has an input buffer for storing a sequence of fields of said at least two real-time uncompressed digital video streamsvideo inputs and an output buffer for storing a sequence of fields of said uncompressed digital video streams having been editedgraphics processor video output.

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Claim 7 (original): The apparatus as claimed in claim 6, wherein said input buffer also stores input graphic image fields.

Claim 8 (canceled)

Claim 9 (currently amended): The apparatus as claimed in claim 7, further comprising an input for compressed digital video input streams from an external device, and a decompression device, one of said at least two real-time uncompressed digital video streams video inputs comprising decompressed data from said compressed digital video input stream.

Claim 10 (currently amended): The apparatus as claimed in claim 9, wherein said input for compressed digital video input streams comprises one of an IEEE 1394 interface and an SDTI interface.

Claim 11 (new): A video editing apparatus for performing video editing in real-time of video streams, the apparatus comprising:

a video decoder for producing uncompressed digital video streams from said video streams;

a storage device for storing video data;

a codec for providing at least two real-time uncompressed digital video streams from at least one of said video data provided by said storage device and said uncompressed digital video streams provided by said video decoder;

a graphics chip having at least two video inputs for respectively receiving said at least two real-time uncompressed digital video streams, said graphics chip further having a 2D graphics engine and a 3D rendering engine respectively for providing 2D and 3D functions used for said video editing of said at least two real-time uncompressed digital video streams, said graphics chip further comprising a video output for providing edited uncompressed digital video streams;

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a video encoder for providing a display signal from at least one of said uncompressed digital video streams and said edited uncompressed digital video streams;

a first video bus for transferring said uncompressed digital video streams from said video decoder to said codec, and for transferring said edited uncompressed digital video streams from said video output to said video encoder when said apparatus is operating in a real-time video editing mode; and

a time division multiplexed bus for transferring said at least two real-time uncompressed digital video streams from said codec to said at least two video inputs when said apparatus is operating in a real-time video editing mode.

12. The apparatus as claimed in claim 11, wherein said video decoder uses said first video bus for transferring uncompressed video digital video streams to said video encoder in a non-editing playback mode, and said video decoder uses said first video bus for transferring uncompressed digital video streams from said video decoder to said codec in a video capture mode.